

ABSTRACT OF THE DISCLOSURE

Disclosed are a film bulk acoustic resonator, a duplexer filter having the same, and a semiconductor package thereof. The film bulk acoustic resonator
5 comprising: a semiconductor substrate; a lower electrode more than two layers formed at an upper surface of the semiconductor substrate; a piezoelectric layer deposited on an upper surface of the lower electrode with a certain thickness; and an upper electrode more than two layers formed at an upper surface of the piezoelectric layer, has an excellent bonding characteristic. The duplexer filter can
10 microminiaturize a size thereof by integrating a film bulk acoustic filter formed by connecting the plurality of film bulk acoustic resonators serially and in parallel and peripheral passive elements of the film bulk acoustic filter into one semiconductor chip. Also, the semiconductor package is suitable for the duplexer filter.